Introduction

U.S. Fleet Forces (USFF) nominates the Navy team that prepared the Virginia Capes (VACAPES), Navy Cherry Point (NCHPT), and Jacksonville (JAX) Range Complex Environmental Impact Statements (EIS)/Overseas Environmental Impact Statements (OEIS), hereinafter referred to as the East Coast Range Complex Environmental Planning Team or "Team," for the FY09 CNO Environmental Planning Team Award. These three documents, though separate EISs/OEISs, were prepared simultaneously as elements of the tightly integrated, coordinated Tactical Training Theater Assessment and Planning (TAP) Program environmental planning effort.

The three integrated Teams, stood up in 2005 and active through signing of the Records of Decision (ROD) in June 2009, were composed of Navy and contractor personnel with wideranging expertise in naval operations, natural resources, and environmental planning and compliance. In the process of producing high quality documents delivered on schedule, the teams needed to accurately describe operational environmental and training requirements, thoroughly comprehend and comply with the myriad applicable environmental laws and regulations, collect and interpret best available science, create methodologies to predict environmental effects, and compile it all into scientifically accurate and readable studies. They faced and overcame significant challenges in achieving this goal, including the sheer operational and geographic scope of the combined effort, regulatory requirements and legal risk, time constraints, evolving operational requirements, the limited science regarding environmental effects of unique military training activities, and team member retention.

Background

The Atlantic Fleet has conducted military readiness (training) activities off the U.S. east coast for over 80 years. Sustainment of this ability to conduct rigorous, realistic training is essential in ensuring U.S. Sailors and Marines can effectively meet the ever-evolving challenges to our nation's security. In recent years, Navy training areas have come under increasing pressure from numerous types of encroachment that threaten to erode military readiness. Most notably, the Navy lost key training capabilities with the closure of the Atlantic Fleet Weapons Training Facility in Vieques, PR. At the same time, new and more capable weapons and platforms require larger training areas with more sophisticated instrumentation to safely conduct realistic training.

USFF and Commander Pacific Fleet (CPF) developed TAP to protect and transform critical training capabilities and ensure continued access to land based and at-sea training areas. TAP organized all aspects of training area sustainment into a comprehensive, coherent, mutually reinforcing program based on training requirements and military readiness. A central pillar of TAP is environmental planning for Fleet training areas and activities to ensure full compliance with applicable environmental laws and regulations.

Prior to TAP, the Fleets prepared environmental planning and compliance documentation for each individual major training exercise. However, these documents lacked scientific rigor because they never established comprehensive operational or environmental baselines and depended on qualitative analyses. In addition to its inefficiency, this process was becoming

increasingly difficult to defend as the regulatory environment moved toward programmatic documents grounded on quantitative analysis.

TAP environmental planning was designed to address these vulnerabilities. The first USFF document initiated was the Atlantic Fleet Active Sonar Training (AFAST) EIS/OEIS whose study area encompassed most of the 2nd Fleet Area of Responsibility. Its timeline was driven by the January 2009 expiration date of the National Defense Exemption that provided DoD with a measure of protection from lawsuits seeking to enjoin Navy sonar operations world-wide. While preparing the AFAST EIS, USFF kicked off the VACAPES, NCHPT and JAX EIS/OEISs to cover all other Navy and Marine Corps training in subject Operating Areas (OPAREAs). While not driven by legal action, the aggressive timelines for all three documents reflected OPNAV's desire to bring the Fleets into compliance with all applicable environmental laws as expeditiously as possible.

Organization and Staffing

USFF is responsible for manning, equipping, and training all CONUS-based Navy units to conduct combat operations at and from the sea. As such, USFF oversees all unit level and integrated/coordinated training for 2nd Fleet Carrier Strike Groups, Amphibious Readiness Groups and independent deployers. USFF centralized environmental planning responsibilities for all Atlantic Fleet training activities and training areas within the Environmental Readiness Division of its N4 Operational Readiness Directorate. USFF subordinate operational commands have no organic environmental planning capability. The Environmental Division maintains strong collaborative relationships with other USFF divisions and operational commands to fulfill its environmental planning mandate.

Providing comprehensive, robust environmental coverage for all Atlantic Fleet training in the VACAPES, NCHPT, Charleston and JAX OPAREAs presented the Environmental Division with a daunting challenge. The East Coast Environmental Planning Team needed to conduct their analysis in a complex operational and regulatory environment on a vast ecosystem, addressing common issues consistently throughout while providing site-specific detail and analysis. The Operational Environmental Support Branch Head, Hank Eacho, devised a strategy of concurrently developing three separate but fully integrated EIS/OEISs, establishing a matrix organization with each component led by members of his Branch. Christine Wallace, USFF NEPA Program Manager, launched the overall effort. When Christine moved to a new position, John Van Name retained leadership of the environmental planning function for all three documents as well as Project Lead for VACAPES and JAX EIS/OEISs. Bryan Murphy, a retired naval aviator, led the Navy Cherry Point effort and the overall operational data collection and requirements definition function. Former National Marine Fisheries Service (NMFS) employee David MacDuffee managed the at-sea permitting and compliance documentation function for all three documents. The complexity of the issues required wide-ranging expertise, including naval operations, exercise planning, environmental planning and compliance, environmental law, marine biology, natural resources, acoustics analysis, information technology and Geographic Information Systems (GIS), public involvement, and program management. Primary Team members and significant contributors are listed in Table 1.

The Team worked closely with OPNAV, ASN, USMC and NMFS staffs to ensure they adopted a scientifically rigorous, legally defensible analytical approach. Given the documents' complexity and the members' extensive geographic dispersion, the Team participated in frequent conference calls, meetings, and working sessions to ensure the documents progressed on schedule. The Team performed numerous briefings to the chain of command, as well as appropriate outreach and engagement activities, such as public briefings and hearings.

Challenges and Unusual Circumstances

VAST OPERATIONAL AND GEOGRAPHIC SCOPE: The combined study areas for the three projects span about 100,000 nm² of ocean area off the eastern seaboard and lower Chesapeake Bay and its overlying airspace. The activities also span multiple warfare training areas (e.g., antiair, amphibious, strike, anti-surface, mine, etc.). The Navy had never attempted to fully define the scope, amount, or type of its actual at-sea training activities in the Atlantic Ocean OPAREAs. Also, while the U.S. Navy arguably has the most extensive, accurate data on marine resources distribution, the data gaps over such a large ocean area are still widespread, complicating environmental effects analysis.

DOCUMENT CONSISTENCY: In addition to the VACAPES, NCHPT and JAX EIS/OEISs, USFF was preparing EIS/OEISs for AFAST, Gulf of Mexico and Undersea Warfare Training Range, and CPF was preparing its own documents for Hawaii Range Complex, Southern California and Northwest Training Range Complex. All dealt with the same training activities, weapon systems, and ordnance. Regulator and non-governmental organizations' interests in all these efforts dictated lockstep consistent descriptions and analysis for like events. However, maintaining the expected level of consistency between documents was a significant challenge.

COORDINATION WITH U.S. MARINE CORPS: Many Navy and Marine Corps training activities are inextricably linked, particularly in the three range complexes of Navy Cherry Point OPAREA, Marine Corps Air Station Cherry Point and Marine Corps Base Camp Lejeune and across the sea-land boundary of the NCHPT EIS/OEIS study area. Thus, bringing Navy training activities into environmental compliance required partnering with the Marine Corps. The sister services had not previously cooperated on an environmental planning effort of this magnitude.

REGULATORY REQUIREMENTS: Navy training activities at sea are subject to a suite of U.S. environmental laws and executive orders. Depending on the location of the activity, legal requirements may include the National Environmental Policy Act (NEPA), Executive Order 12114, the Marine Mammal Protection Act (MMPA), the Endangered Species Act (ESA), the Magnuson-Stevens Fishery Conservation and Management Act (MSA), and the Coastal Zone Management Act (CZMA). When applied to the VACAPES/ NCHPT/JAX study areas, the regulations required the Team to work extensively with federal regulators at the national and regional levels and state regulators from seven states. These requirements, coupled with the Navy's need to train with live fire and explosives, presented a significant compliance challenge.

HEIGHTENED LEGAL RISK: In recent years, Navy has defended itself against four separate lawsuits seeking to impose onerous restrictions on its use of mid-frequency active (MFA) sonar that would have significantly and adversely impacted military readiness. Even though the

AFAST EIS/OEIS was addressing East Coast MFA sonar training, the Navy expected environmental groups to challenge the adequacy of its environmental planning, permitting, and consultation processes. Environmental coverage for non-sonar training activities in the remaining warfare areas and activities necessary to support the full spectrum of Navy training was still tenuous and subject to challenge.

TIMELINE CONSTRAINTS: The Team was required to complete all three EIS/OEISs simultaneously in accordance with compressed timelines mandated by SECNAV. OPNAV N4 also closely monitored these efforts, and expected USFF to meet "non-negotiable" project milestones at all costs. This resulted in many long workdays and weekends to ensure USFF delivered high quality documents on-schedule.

OPERATIONAL FLEXIBILITY AND EVOLVING REQUIREMENTS: During the environmental planning process, operational needs continued to evolve, as evidenced by the Navy's increased focus on maritime security and anti-piracy. Likewise, requirements from other projects, such as the Mayport Homeporting and Kings Bay Force Protection planning efforts, were "folded" into TAP regulatory consultations. The TAP documents had to evolve to support these requirements while avoiding restarting or delaying project timelines.

STATE OF THE SCIENCE: The body of knowledge regarding environmental impacts of military readiness continues to evolve, and the Team had to adapt efforts to incorporate emerging issues and information to ensure take authorizations and consultations were scientifically robust and defensible in the face of potential legal challenges. For example, several regulators raised concerns during document development regarding essential fish habitat impacts from expended military materials.

Environmental Planning Summary

USFF designed its action alternatives to satisfy the Purpose and Need while also minimizing environmental impacts. The No Action alternative reflected current activity levels. The first action alternative addressed introduction of new weapons and systems, new missions and requirements, and changes in force structure. The second action alternative considered the impacts of new mine warfare training areas and dramatic decreases in use of high explosives at sea. Next to sonar, underwater detonations from high explosive munitions were the largest source of potential marine mammal "takes." Reducing the use of high explosives at-sea reduced estimated takes to such a low level as to prompt discussion about whether the Navy even needed to seek NMFS authorization.

Outstanding Features

Producing quality products on schedule in the face of the above challenges required innovative management approaches, which are outlined below:

DESIGNED MATRIX APPROACHES: Throughout these efforts, Team members applied innovative cross-organizational and cross-functional approaches to develop, leverage and lead staff to meet compressed deadlines under intense scrutiny from Navy senior leadership. In

addition to an individual Project Lead for each of the three EIS/OEISs, USFF had three functional leads with responsibilities across all three documents:

- The NEPA Lead (Mr. John Van Name) not only enforced consistent document format, analytical protocols, definitions and descriptions, but worked to address Navy-wide consistency for mitigation measures, action alternatives, and Purpose and Need Statements.
- The Operational Data Collection and Requirements Definition Lead (Mr. Bryan Murphy)
 established the list of training activities, required data fields and format for the Description of
 Proposed Action and Alternatives (DOPAA). Invaluable support was also provided by Jim
 Casey of USFF Live Training Branch (N73) to collect data and respond expeditiously to a
 steady stream of information requests from the environmental planners.
- The At-Sea Compliance Documentation Lead (Mr. Dave MacDuffee) was responsible for the
 preparation and submission of three range complex specific MMPA Letters of Authorization
 (LOA) applications and one east coast-wide ESA Biological Evaluation in close coordination
 with OPNAV N45 and NMFS staffs.

COLLABORATIVELY PREPARED EISs: Staying on schedule required an unprecedented level of collaboration that took several forms.

- USFF, NAVFAC, and contractor Team members worked side-by-side from pre-kickoff
 preparatory work through submission of EISs. The USFF NEPA Lead co-chaired meetings
 and phone calls with members of the integrated team. Tiger Team meetings typically
 involved all three EIS/OEISs since many of the issues affected all documents and many
 Team members worked on multiple projects.
- Specific members of the Team developed effective working relationships with USFF, OPNAV, ASN, and NMFS staffs that facilitated expeditious resolution of several policy and scientific issues, and generation of three NMFS MMPA proposed rules.
- The Team's NEPA Lead also co-chaired routine phone calls and quarterly face-to-face meetings with his CPF counterpart to ensure consistency with similar documentation being prepared on the west coast.

ESTABLISHED AND IMPLEMENTED QUALITY ASSURANCE/ QUALITY CONTROL (QA/QC) REVIEW PRINCIPLES: The Team developed a first-of-its-kind, principle-based environmental planning QA/QC process that improved the overall quality, consistency, and legal defensibility of the EISs. OPNAV N45 has subsequently incorporated this review process into OPNAVINST 5090.1 to serve as the Navy standard for ensuring quality EIS documents. This process is defined by the following attributes:

- <u>Logical</u> The data clearly supports the conclusions;
- <u>Consistent</u> –Analyses, DOPAA, and other chapters are consistent with other TAP EISs prepared by the same command and across commands;
- <u>Legally sufficient</u> The EISs provide a sufficient level of detail and analysis to comply with all relevant laws and regulations;
- <u>Technically sufficient</u> The EISs evaluate all potentially affected areas of the human environment. Analyses are prepared and reviewed by appropriate subject matter experts; take an objective, unbiased, hard look at the issues; and anticipate and respond to potential opposing views; and

• <u>Understandable</u> – Non-technical audiences can understand the EISs, including individuals with no scientific or Navy background

APPLIED STANDARDIZED RISK COMMUNICATION TRAINING: While risk communication training has long played a role in preparing Navy personnel for public meetings, the Team institutionalized this training in support of EIS scoping and public forums.

INTEGRATED NAVY-MARINE CORPS ENVIRONMENTAL PLANNING EFFORTS: To produce solid environmental coverage for all Navy and Marine Corps training in the Cherry Point area, USFF and Marine Forces Command cooperated to an unprecedented degree in three environmental planning efforts:

- Navy Cherry Point Range Complex EIS/OEIS
- MCAS Cherry Point Range Operations Environmental Assessment (EA)
- MCB Camp Lejeune Range Operations EA

While these were not joint documents, the Navy EIS/OEIS covers all Marine Corps at-sea training, and the two Marine Corps EAs cover all Navy land and inland waters training. The three environmental planning teams closely synchronized training activity descriptions and quantities to ensure a coordinated, accurate picture of amphibious and air operations and major training exercises that spanned multiple study areas.

Accomplishments

While the EIS and related regulatory efforts focus on environmental requirements, the East Coast Range Complex Environmental Planning Team's primary goal is to provide support to the warfighter and to sustain military readiness. As a direct result of the Team's work, three East Coast Range Complex Final EISs and associated marine species regulatory permits were successfully completed and have provided total environmental coverage for live training along the east coast with no loss of current capabilities. Some additional specific examples of the TAP EIS efforts' excellence in warfighter support are as follows:

- Operations Integration. Team members vastly improved the accuracy and defensibility of training requirements in each FEIS by working with the operational community to: 1) improve descriptions of proposed action and alternatives, 2) develop concise description and quantification of operations, and 3) show how operational requirements and supporting environmental analyses were integrated with sonar activities addressed in the AFAST EIS.
- Fish Habitat Issues. Team members proactively addressed emerging fish habitat issues that had Navy-wide implications and immediately threatened Fleet's ability to conduct training at critical east coast locations. They worked with regulatory authorities to quickly identify their concerns and negotiated a strategy to prevent any impacts to Fleet readiness. One result was the focused data collection strategy exemplified by seafloor mapping data collection efforts. This groundbreaking work required extensive coordination with OPNAV and ASN environmental leadership and has set the standard for Navy responses to similar future issues.
- Managing Last Minute Regulatory Actions. The FEISs and accompanying MMPA authorizations, ESA consultations, and CZMA Consistency Determinations were completed in accordance with compressed milestones mandated by SECNAV, despite regulatory delays

that threatened a major Fleet training exercise. The ESA Biological Opinion and MMPA LOA were received four days before the event began, and required key Team members to work directly with ASN counsel so that Final EIS RODs could reflect regulatory findings in time to support this exercise.

- Support of New Mine Warfare Capabilities. The three TAP EIS/OEIS efforts supported the establishment of required mine warfare training ranges along the east coast and in the lower Chesapeake Bay. These newly established range capabilities are also being leveraged by the RDT&E community to support the development of new mine warfare systems.
- Post-ROD Communication. The At-Sea Training Implementation Plan (Environmental) (A-STRIP(E)) was developed to provide range planners and users an easy to understand compilation of all east coast EIS/OEIS and permit derived mitigation, monitoring, and reporting requirements. A-STRIP(E) provides a single source for all pertinent authorizations, restrictions, and requirements, ensuring continued compliance with existing permits. Moreover, to support implementation of these permit requirements, individual team members: 1) worked with experts from SPAWAR to promulgate marine mammal mitigations associated with these documents by developing a first-of-its-kind "downloadable" update of the Navy's Protective Measures Assessment Protocol tool, eliminating the need to provide such changes via mass-mailing of CDs and 2) developed and initiated an extensive east coast at-sea monitoring program to ensure potential impacts on marine mammals and sea turtles are minimized during Navy training and to gain a better understanding of the effectiveness of Navy mitigation measures.

Table 1: East Coast Range Complex Environmental Planning Team		
Name	Title/Position/Organization	Discipline
John Van Name	NEPA Program Manager/ USFF	Environmental planning/management
Hank Eacho	Env Ops Supports Branch Head/ USFF	Environmental management
Bryan Murphy	Future Readiness Branch Head/ USFF	Fleet training
David MacDuffee	Nat Res Program Manager/ USFF	Marine science/natural resource policy analysis
Greg Thompson	Environmental Engineer/ USFF	Environmental planning
Jim Casey	Live Training Analyst/ USFF	Fleet training and operations
Bob Kull	Parsons	Environmental planning
Joe Campo	Parsons	Environmental planning
Christine Wallace	Former NEPA Program Manager/ USFF	Environmental planning/risk communication
Dominic Yacono	Env Counsel/ USFF	Legal
CDR Kris Delapina	Env Counsel/ USFF	Legal
Christine Koussis	VACAPES EIS NTR/ NAVFACLANT	Environmental planning
Susan Lang	CHPT EIS NTR/ NAVFACLANT	Environmental planning
Kelly Proctor	JAX EIS NTR / NAVFACLANT	Environmental planning
Erin Swiader	Supv Marine Biologist/ NAVFACLANT	Marine biology
Kelly Knight	Supv NEPA Planner/ NAVFACLANT	Environmental planning
Mandy Shoemaker	Marine Resources Specialist/ NAVFACLANT	Marine biology/acoustics
Carter Watterson	Marine Resources Specialist/ NAVFACLANT	Marine fisheries
Danielle Buonantony	Marine Resources Specialist/ NAVFACLANT	Marine biology
Joel Bell	Marine Resources Specialist/ NAVFACLANT	Marine biology
Deanna Rees	Marine Resources Specialist/ NAVFACLANT	Marine biology
Amberly Hall	Env Counsel/ NAVFACLANT	Legal
Amy Farak	Marine Resources Specialist/ NUWC Newport	Marine biology/acoustic analysis
Ann Young	Environmental Analyst/ USFF	Marine biology/policy analysis
Nick Zeoli	Dir of Ins and Facilities/ MARFORCOM	Installations and facilities management
Laura Busch	Nat Res Manager/ USFF	Environmental analysis
David Noble	Former Nat Res Manager/ USFF	Biology/natural resource policy analysis
Bernice Snyder	NEPA Planner/ NAVFACSE	Environmental planning